

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P290683

Luminaire Tested: **14GR-LD5-40-F1-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P290683
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-084-7)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-40-F1-UNV-L93050-W2A1-U-4500K
Description: GRLED 1x4 TUNABLE WHITE TROFFER
WITH F1 LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3820.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.15 / 1.23
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

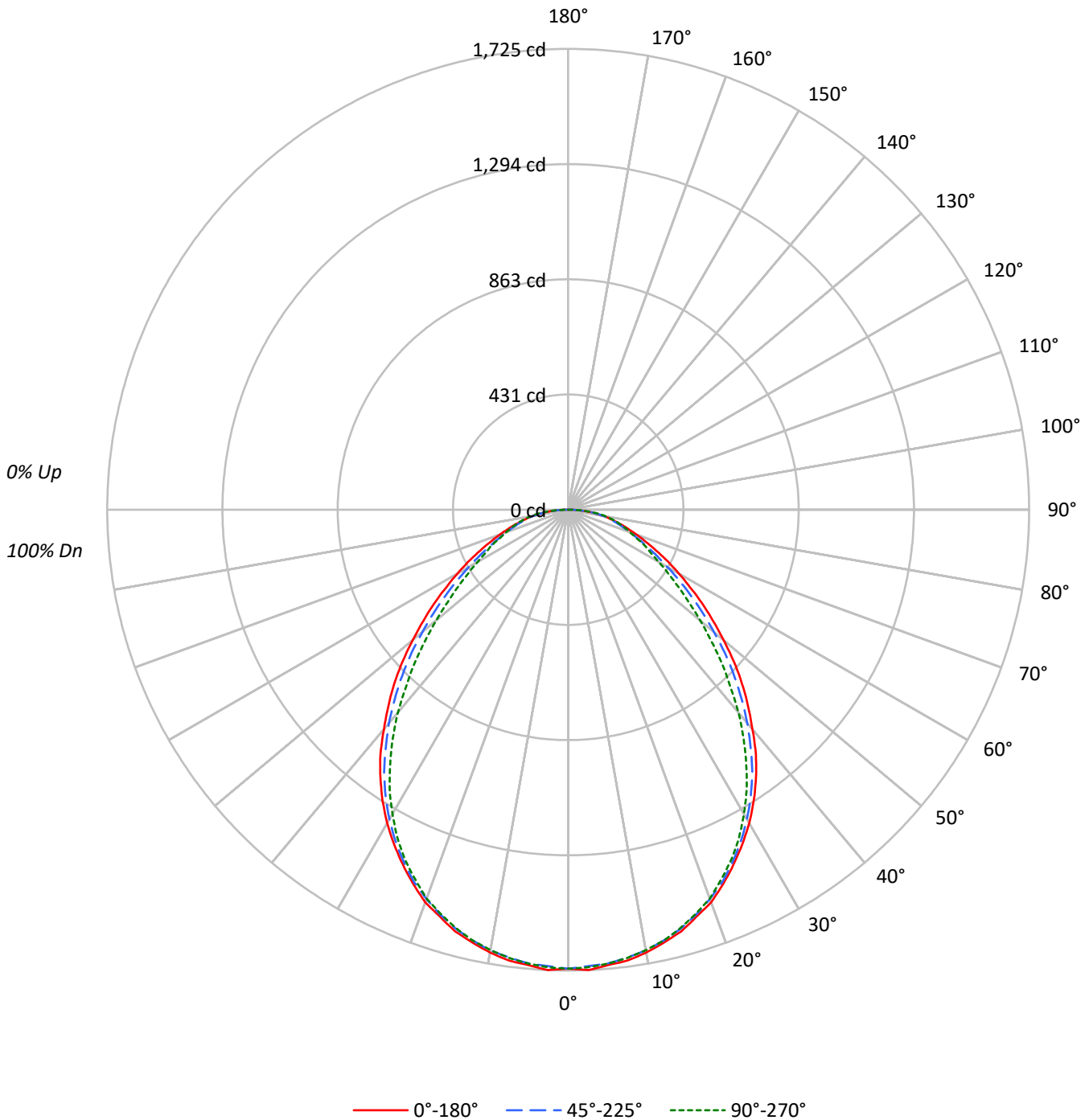
Input Watts (W): 35.061
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	101	93	87	81	98	91	85	80	88	83	78	84	80	77	81	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4623	4623	4623
5°	4622	4605	4608
10°	4599	4577	4575
15°	4552	4525	4518
20°	4478	4441	4436
25°	4350	4321	4290
30°	4209	4157	4087
35°	4024	3946	3817
40°	3768	3664	3482
45°	3499	3342	3099
50°	3175	2977	2698
55°	2872	2629	2358
60°	2578	2305	2102
65°	2314	2057	2013
70°	2135	1915	1936
75°	2039	1921	2031
80°	2063	2049	2211
85°	2137	2109	2353



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.2	4.2
10°-20°	458.5	12.0
20°-30°	669.6	17.5
30°-40°	746.1	19.5
40°-50°	672.2	17.6
50°-60°	502.5	13.2
60°-70°	331.5	8.7
70°-80°	202.4	5.3
80°-90°	75.1	2.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1290.2	33.8
0°-40°	2036.3	53.3
0°-60°	3211.1	84.1
0°-90°	3820.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3820.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1718	1718	1718	1718	1718	
5°	1711	1709	1705	1714	1706	163
15°	1634	1628	1624	1634	1622	460
25°	1465	1460	1455	1458	1445	674
35°	1225	1214	1201	1180	1162	764
45°	919	910	878	838	814	708
55°	612	602	560	514	503	548
65°	363	352	323	310	316	364
75°	196	193	185	191	195	209
85°	69	66	68	75	76	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1718.0	1718.0	1718.0	1718.0	1718.0
2.5°	1725.0	1717.1	1710.1	1720.6	1714.4
5°	1710.9	1709.2	1704.8	1713.6	1705.7
7.5°	1702.2	1696.1	1690.8	1701.3	1692.6
10°	1682.9	1679.4	1675.0	1683.8	1674.2
12.5°	1659.3	1655.8	1651.4	1661.9	1651.4
15°	1633.9	1627.8	1624.3	1633.9	1621.6
17.5°	1597.1	1594.5	1589.2	1598.9	1586.6
20°	1563.8	1554.2	1550.7	1557.7	1549.0
22.5°	1515.7	1508.7	1507.8	1512.2	1497.3
25°	1464.9	1459.6	1455.3	1457.9	1444.8
27.5°	1411.5	1404.5	1399.2	1398.4	1384.3
30°	1354.6	1345.8	1337.9	1330.9	1315.2
32.5°	1292.4	1281.9	1271.4	1260.0	1243.4
35°	1225.0	1214.5	1201.3	1180.3	1161.9
37.5°	1154.1	1141.8	1120.8	1096.3	1077.9
40°	1072.6	1066.5	1042.9	1011.3	991.2
42.5°	996.4	989.4	959.7	924.6	897.5
45°	919.4	909.8	878.2	838.0	814.3
47.5°	840.6	831.0	795.9	746.0	725.0
50°	758.3	753.0	711.0	665.5	644.5
52.5°	683.0	676.8	633.9	588.4	569.1
55°	612.1	602.4	560.4	514.0	502.6
57.5°	541.1	530.6	491.2	451.8	443.9
60°	479.0	465.8	428.2	397.5	390.5
62.5°	420.3	405.4	373.9	350.2	346.7
65°	363.4	352.0	323.1	310.0	316.1
67.5°	314.3	303.0	281.9	276.7	274.9
70°	271.4	260.9	243.4	245.2	246.0
72.5°	232.0	225.9	212.8	217.2	220.7
75°	196.1	192.6	184.8	190.9	195.3
77.5°	163.7	161.1	157.6	162.9	169.9
80°	133.1	131.3	132.2	135.7	142.7
82.5°	102.4	98.9	101.6	108.6	113.0
85°	69.2	66.5	68.3	75.3	76.2
87.5°	32.4	32.4	31.5	36.8	36.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)